

1                                   **SELF ADJUSTING ELECTRICALLY POWERED**  
2                                   **PARKING BRAKE ACTUATOR MECHANISM WITH MANUAL RELEASE**  
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4    Abstract of the Disclosure

5                   An electrically powered actuator mechanism for operating a vehicle parking brake  
6 including a reversible electrical motor having output gearing driving a sector gear. A wrapped  
7 spring clutch drivingly connects the sector gear to an intermediate operator cable wind up wheel.  
8 The intermediate cable is connected to the brake cable to set the brakes when the operator cable  
9 is wound up by energization of the motor in one direction, with a load sensor turning off the  
10 motor when a predetermined tension load is reached. Locking motor gearing holds the brake in  
11 the set condition. Reversal of the motor upwinds the cable to release the parking brake. A self  
12 adjusting feature is provided by a pretensioned clock spring creating a torsional bias on the wind  
13 up wheel tending to maintain a predetermined tension in the brake cable. A spring clutch is  
14 released by engagement of a release arm to allow the clock spring to adjust the wind up wheel. A  
15 cable operated manual release causes a release lever to engage the clutch spring release arm to  
16 allow the cable to release although the clock spring monitoring a minimum tension after release  
17 of the winding wheel.